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10/585,635	07/11/2006	Anna Quattropani	293065US0PCT	8529

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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STOCKTON, LAURA LYNNE

ART UNIT	PAPER NUMBER
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1626

NOTIFICATION DATE	DELIVERY MODE
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04/29/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/585,635	<b>Applicant(s)</b> QUATTROPANI ET AL.	
	<b>Examiner</b> Laura L. Stockton	<b>Art Unit</b> 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on January 21, 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-15, 17 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

**Claims 2-15 and 17-26 are pending in the application.**

***Election/Restrictions***

Applicant's election with traverse of Group I (claims 1-17 and 26 - drawn to products of formula (I) wherein X is S) in the reply filed on July 15, 2009 was acknowledged in the previous Office Action. The requirement was deemed proper and therefore made FINAL in the previous Office Action.

Subject matter not embraced by elected Group I and Claims 18-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 15, 2009.

The objection to the instant specification as failing to provide proper antecedent basis for the claimed subject matter is hereby withdrawn. The objections and rejections made in the previous Office Action that do not appear below have been overcome by Applicant's amendments to the claims. Therefore, arguments pertaining to these rejections will not be addressed.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-15, 17 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is a new matter rejection. There is no support in the original filed specification or the original filed claims for the entire list of substituents represented by the  $R^6$  variable. Applicant states that support could be found on pages 19-22 of the instant specification. However, it would appear that on numerous occasions, commas are missing separating various substituents and therefore, the substituents now being claimed are not supported in the instant specification. See, wherein  $R^6$  represents "acetyl phenyl benzyl piperazine carbonyl phenyl phenyl optionally substituted with heteroaryl aryl amino sulfonyl", "aryl sulfonyl fused phenyl", etc. Therefore, the claims lack written description as such.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-15, 17 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has amended the definition of instant variable  $R^6$  in currently amended claim 2 in such a way that the definition is confusing because commas separating various substituents are missing.

In claim 2, under the definition of  $R^6$ , the substituents "C<sub>1</sub>-C<sub>6</sub>-alkyl!", "2-nitrophenyl!", and "sulfonyl" are unclear.

In claim 7,  $R^6$  representing "aryl C<sub>1</sub>-C<sub>6</sub> alkyl" lacks antecedent basis from claim 2.

In claim 9,  $R^6$  representing "phenyl" or "pyridine" lacks antecedent basis from claim 2.

In claim 12, R<sup>6</sup> representing "C<sub>1</sub>-C<sub>6</sub> alkyl heteroaryl" lacks antecedent basis from claim 2.

In claim 17, there are species listed which lack antecedent basis from claim 2. See, for example, the first compound listed in claim 17, the second compound listed in claim 17, the third compound listed in claim 17, the fourth compound listed in claim 17, the fifth compound listed in claim 17, etc.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-5, 8, 11-14 and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by:

f) CA Registry No. 412919-68-7 {entry date in the Registry file on STN May 9, 2002};

i) Inaba et al. {JP 2002/53566 A} - see, for example, Compounds 5 and 6 on page 40 of 48 in the provided English translation;

j) CA Registry No. 412919-72-3 {entry date in the Registry file on STN May 9, 2002} or

k) Suciu et al. {CA 75:35865, 1971} - see the compound of CA Registry No. 32519-86-1.

Each of the above cited prior art disclose at least one compound that is embraced by the instant claimed invention. Therefore, each of the above cited prior art anticipate the instant claimed invention.

### ***Response to Arguments***

Applicant's arguments filed January 21, 2010 have been fully considered but they are not persuasive. Applicant argues that the currently amended claims are



not anticipated under either 35 USC 102(b) or 35 USC 102(e) by any of the previous cited prior art.

In response, it is disagreed that none of the previously cited prior art anticipate the currently amended claims under 35 USC 102(b). In instant independent claim 2, the R<sup>6</sup> variable can represent substituents such as C<sub>1</sub>-C<sub>6</sub>-alkyl and C<sub>1</sub>-C<sub>6</sub>-alkyl aryl. The instant specification (page 10, lines 17-19) defines C<sub>1</sub>-C<sub>6</sub>-alkyl aryl as follows:

**“C<sub>1</sub>-C<sub>6</sub>-alkyl aryl” refers to C<sub>1</sub>-C<sub>6</sub>-alkyl groups having an aryl substituent, including benzyl, phenethyl and the like.**

The instant specification discloses that the substituents can be substituted (page 16, lines 20-28)

- 20 “Substituted or unsubstituted”: Unless otherwise constrained by the definition of the individual substituent, the above set out groups, like “alkenyl”, “alkynyl”, “aryl”, “heteroaryl”, “cycloalkyl”, “heterocycloalkyl” etc. groups can optionally be substituted with from 1 to 5 substituents selected from the group consisting of “C<sub>1</sub>-C<sub>6</sub>-alkyl”, “C<sub>2</sub>-C<sub>6</sub>-alkenyl”, “C<sub>2</sub>-C<sub>6</sub>-alkynyl”, “cycloalkyl”, “heterocycloalkyl”, “C<sub>1</sub>-C<sub>6</sub>-alkyl aryl”, “C<sub>1</sub>-C<sub>6</sub>-alkyl heteroaryl”,  
25 “C<sub>1</sub>-C<sub>6</sub>-alkyl cycloalkyl”, “C<sub>1</sub>-C<sub>6</sub>-alkyl heterocycloalkyl”, “amino”, “ammonium”, “acyl”, “acyloxy”, “acylamino”, “aminocarbonyl”, “alkoxycarbonyl”, “ureido”, “aryl”, “carbamate”, “heteroaryl”, “sulfinyl”, “sulfonyl”, “alkoxy”, “sulfanyl”, “halogen”, “carboxy”, trihalomethyl, cyano, hydroxy, mercapto, nitro, and the like.

Additionally, dependent claims 14 and 15 indicates that the R<sup>4</sup> variable is an optionally substituted C<sub>1</sub>-C<sub>6</sub>-alkyl. Therefore, the above cited prior art do anticipate the instant currently amended claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-15, 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba et al. {JP 2002/53566 A}, Wu et al. {WO 2006/050351 A2} and Takaya et al. {U.S. Pat. 4,649,146}, each taken alone. An English translation has been provided of the JP

document with the previous Office Action and will be referred to hereinafter.

***Determination of the scope and content of the prior art (MPEP  
§2141.01)***

Applicant claims thiazole compounds. **Inaba et al.** (see entire document; particularly page ii of 48 thru page 16 of 48, page 25 of 48 thru page 26 of 48; and especially Compounds 5 and 6 on page 40 of 48), **Wu et al.** (see entire document; particularly pages 4, 5, 7 and 10-12; and especially Compound Number 1 in Table 1 on page 18) and **Takaya et al.** (see entire document; particularly column 1; formula [Ik] at the top of column 5, lines 1-5; column 11, lines 28-33; column 12, lines 41-45; and especially Examples 85 and 87 in column 46 and Compound 123 in column 55) each teach thiazole compounds that are either structurally the same as (see above 102 rejection) or structurally similar to the instant claimed compounds.

***Ascertainment of the difference between the prior art and the claims***  
***(MPEP §2141.02)***

The difference between some of the thiazole compounds of the prior art and the compounds instantly claimed is that the instant claimed thiazole compounds are generically described in the prior art.

***Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)***

The indiscriminate selection of "some" among "many" is *prima facie* obvious, *In re Lemin*, 141 USPQ 814 (C.C.P.A. 1964). The motivation to make the claimed compounds derives from the expectation that structurally similar compounds would possess similar activity (e.g., protein kinase C $\gamma$  inhibitors).

One skilled in the art would thus be motivated to prepare products embraced by the prior art to arrive at the instant claimed products with the expectation of obtaining additional beneficial products which would be useful as, for example, a pain killer. The instant claimed invention would have been suggested to one

skilled in the art and therefore, the instant claimed invention would have been obvious to one skilled in the art.

### ***Response to Arguments***

Applicant's arguments filed January 21, 2010 have been fully considered but they are not persuasive. Applicant argues that Inaba et al., Wu et al. and Takaya et al. do not teach compounds in the homologous series. In response, the previous Office Action did not state that the cited prior art taught homologs of the instant claimed compounds and therefore, Applicant's arguing such a point is unclear.

Applicant argues that the cited prior art provide only general disclosure as to very different compounds with different activities.

In response, Inaba et al. disclose compounds that anticipate the instant claimed compounds as well as make obvious other compounds instantly claimed. It is

agreed that Wu et al. and Takaya et al. generically teach the instant claimed compounds. However, the teaching in Wu et al. and Takaya et al. would lead one skilled in the art toward the instant claimed compounds. Note, the specific locations in each reference detailed above.

Further, there is no requirement that the prior art must suggest that the claimed product will have the same or similar utility as that discovered by applicant in order to support a legal conclusion of obviousness. In re Dillon, 16 U.S.P.Q. 2d 1897, 1904 (Fed. Cir. 1990). For all the reasons stated above, the rejection is deemed proper and therefore, the rejection is maintained.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

This application contains subject matter not embraced by elected Group I and claims 18-25 drawn to an invention nonelected with traverse in the reply

filed on July 15, 2009. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura L. Stockton whose telephone number is (571) 272-0710. The examiner can normally be reached on Monday-Friday from 6:00 am to 2:30 pm. If the examiner is out of the Office, the examiner's supervisor, Joseph McKane, can be reached on (571) 272-0699.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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The Official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

/Laura L. Stockton/  
Laura L. Stockton  
Primary Examiner, Art Unit 1626  
Work Group 1620  
Technology Center 1600

April 27, 2010